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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/099,978	03/19/2002	Michiya Okada	62807-055	5511

7590

04/02/2003

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EXAMINER

VARGAS, DIXOMARA

ART UNIT

PAPER NUMBER

2859

DATE MAILED: 04/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/099,978

Applicant(s)

OKADA ET AL.

Examiner

Dixomara Vargas

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-10 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 and 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 19 March 2002 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the non-patent literature "NMR for Protein" by Yoji, Arata and "Book of NMR" by Yoji, Arata had no English translation. The rest of the information disclosure statement was considered. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 – 4 and 7 – 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson (U. S. Patent 5,552,709).

With respect to claim 1, Anderson discloses a nuclear magnetic resonance spectrometer for liquid-solution which comprises (abstract) a superconductive magnet (Figure 1; #11), a high frequency transmission coil and a reception coil and in which a sample such as protein dissolved in a liquid-solution is charged (Column 3, lines 1 – 4 and Figure 1; #20) in a sample tube of a diameter of 5 to 10 mm and is inserted substantially vertically (Column 5, lines 56 – 59 and Figure 1; #16), wherein a stationary magnetic field generated by said superconductive magnet is 11 T or more (Column 1, lines 45 – 48), the direction of the stationary magnetic field generated by said superconductive magnet is in the horizontal direction (Figure 1), a change per hour of proton nuclear magnetic resonance frequency due to a change of said stationary magnetic field is 1.0 Hz or less, the uniformity of said stationary magnetic field in a sample space is 1.0 Hz or less in terms of proton nuclear magnetic resonance frequency (Column 3, lines 53 – 55 and Column 1, lines 13 - 26), said liquid solution sample is inserted in the magnetic field center substantially vertically from above (Figure 1), and said reception coil is a solenoid coil inserted in the magnetic field center from below the spectrometer (Column 3, lines 46 – 49).

4. With respect to claim 2, see rejection of claim 1 above. Anderson also discloses a spectrometer cooled to a superconductivity revealing temperature or less (Column 2, lines 58 – 61).

5. With respect to claims 3 and 4, Anderson discloses said organic sample is a polymer organic compound, protein or ligand. (Column 7, lines 1 – 28).

6. With respect to claims 7 and 8, Andersons discloses said superconductive magnet includes a toroidal magnet placed horizontally (Figure 1).

7. With respect to claim 9, see rejection of claims 2 and 7 above.

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8. With respect to claim 10, Anderson discloses said superconductive magnet is a toroidal magnet placed horizontally and in order to discriminate nuclear magnetic resonance signals generated from adjacent plural samples from each other (Figure 1), the magnetic field intensity applied to the individual samples is regulated (Column 8, lines 25 – 43).

Allowable Subject Matter

9. Claims 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: With respect to claims 5 and 6, the prior art of record fails to teach said superconductive magnet including a paired split magnets for generating a magnetic field in the horizontal direction.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional prior art cited at the PTO 892, discloses different spectrometer structures to examine proteins.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dixomara Vargas whose telephone number is (703) 305-5705.

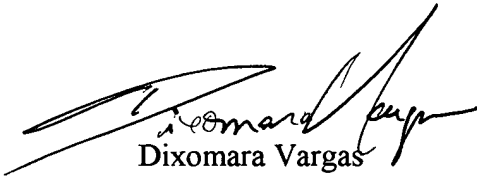
The examiner can normally be reached on 8:00 am. to 4:30 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (703) 308-3875. The fax phone numbers for the

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organization where this application or proceeding is assigned are (703) 305-3432 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0956.



Dixomara Vargas
March 29, 2003



Diego Gutierrez
Supervisory Patent Examiner
Technology Center 2800